

TWO BRITISH NEWCOMERS

Monoplane Trainer and Fast Transport Monoplane: Interesting Designs by C.L.W. Company at Gravesend

FROM Gravesend Airport comes news of a new British make of aeroplane, to be produced in contrasting types. The constructors are the C.L.W. Aviation Co., Ltd. (well known in connection with the C.L.W. patented wing), the directors of which are Messrs. S. Wilding-Cole, O.B.E., W. P. Mackinson, A. Levell, F. S. Welman, and Sqn. Ldr. F. W. H. Lerwill, O.B.E.

The first two machines are a two-seater low-wing trainer—of a type which should be particularly suitable for instruction preparatory to flying modern high-performance military and other machines—and a twin-engined transport monoplane. The former will be the first to appear (the transport will be built only to order), and, all being well, it should be flying next month.

Sqn. Ldr. Lerwill, lately retired from the R.A.F., has had extensive experience in the training of Service personnel which has proved greatly advantageous in the planning of the T.1, as the new two-seater is known.



The projected C.L.W. twin-engined transport, with two Siddeley Cheetahs.

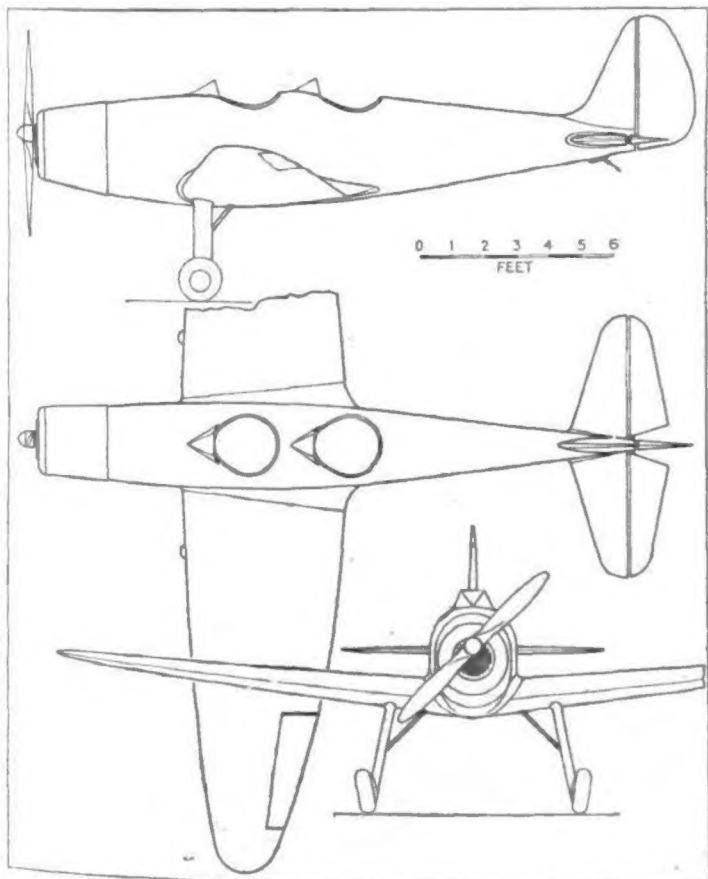
Both the cantilever wing and the fuselage are of quite unusual interest. The former is of the patent C.L.W. type, which is said to possess abnormal qualities of lightness and simplicity and, at the same time, to be very stiff in torsion. Broadly speaking, this type of wing, which tapers both in plain form and thickness and has a single main spar, consists of an open box-like structure, the front and rear members being inter-connected and affixed to the spar with cantilever ribs. Diagonal cross-bracing is provided on both upper and lower surfaces. As originally planned, a straight centre section was to have been embodied, but the prototype machine will have a dihedral angle which originates on the centre line on the under surface of the fuselage. The covering of the main wing panels is of fabric. Split trailing-edge flaps extend from aileron to aileron.

Stressed-Skin Fuselage

The fuselage, a stressed-skin monocoque structure with Alclad covering, is of commendably simple and apparently sturdy design, with the tail plane, elevator, rudder and fin all readily detachable. Of wide track and relatively high to minimise danger of damage to wing tips, the undercarriage is in two separate halves. Sqn. Ldr. Lerwill does not recommend the fitting of brakes for early training.

Normally the machine will be fitted with either the D.H. Gipsy Major of 130 h.p. or the new 90/95 h.p. Pobjoy Niagara III radial. The latter installation will include the newest type of deep chord hinged cowling without the customary Pobjoy "helmets." Petrol feed is by dual engine pumps.

It is the contention of the manufacturers that it is advisable to put the pupil in the front cockpit, as this more closely simulates conditions in normal Service machines to which he will graduate. The rear cockpit is of sufficient diameter to permit the installation of any normal gun ring. When provision is made for gunnery training and similar duties the Gipsy Major engine is recommended, due to its greater power.



The attractive layout of the forthcoming C.L.W. trainer is apparent from these general arrangement drawings.